Nova Scotia Department of Natural Resources

Business Plan 2006-2007

Report DNR 2006-01
April 2006

Table of Contents

1 Message from the Minister and the Deputy Minister 1

2 Mission 2

3 Planning Context 2

3.1 Resource Sustainability 2
3.2 Multiple Competing Demands for our Limited Land and Resource Base 2
3.3 Sustainability of Rural Communities 3
3.4 Climate Change and Weather 3
3.5 Deteriorating Physical Infrastructure 3
3.6 Resource Sector Success 3
3.7 Public Awareness and Understanding of Natural Resources Issues 4

4 Strategic Goals 4

5 Core Business Areas 5

5.1 Natural Resources Management 5
5.2 Crown Lands Administration 7
5.3 Infrastructure and Support Services 7

6 Priorities 8

6.1 Increase Awareness and Understanding of Sound Natural Resources Management Principles and Practices 8

6.1.1 Social Marketing 8

6.2 Continuously Improve Departmental Strategies for Managing Natural Resources and Crown Land 9

6.2.1 Integrated Resource Management (IRM) 9
6.2.2 Land Acquisition Action Plan 10
6.2.3 Resource Strategy Development 10
6.2.4 Legislative and Policy Framework Improvements 11
6.2.5 Climate Change Impact Analysis 12
6.2.6 Off-highway Vehicles Action Plan Implementation 12
6.2.7 Registry of Mineral and Petroleum Titles Modernization 13

6.3 Improve Internal Departmental Planning Processes and Management Systems 13

6.3.1 Business Continuity Planning 13
6.3.2 Infrastructure Maintenance and Replacement Plan 14
6.3.3 Business Planning / Operational Planning Integration 14

6.4 Improve the Department's Work Environment and the Capacity of Staff to Deliver Programs and Services 15

6.4.1 Human Resources Framework 15

7 Budget Context 16

8 Outcomes and Performance Measures 17

1 Message from the Minister and the Deputy Minister

It is our pleasure to present the 2006-2007 Business Plan for the Department of Natural Resources (DNR). This year's plan has a more strategic focus than our plans that were provided for previous years and it can be viewed as a "foundation" plan. Many of our priorities for the up-coming year will either establish the basis for further work to be undertaken in subsequent years, or they will provide information and direction critical for the sound management of the province's natural resources and the administration of our Crown lands.

The priorities described in this plan directly support the government's broad goals and objectives and are consistent with the budget allocation provided to the department for the up-coming fiscal year. We would like to emphasize that these priorities are in addition to the department's many activities which are carried out every year as part of our on-going operation. Department staff operate our provincial camping, day use, and beach parks, run the wildlife park, fight forest fires, deal with infestations of insects and diseases that attack the province's forests, carry out surveys of Crown land boundary lines, enforce our hunting laws, and undertake geoscience, wildlife, and forest related research. Many Nova Scotians are already familiar with these programs and services, and use them directly or benefit from them indirectly.

Addressing the damage to our parks, trails, and forest resources in the central part of the province that resulted from Hurricane Juan in September 2003 has been, for the most part, substantially completed. Two key priorities for 2006-2007 are the implementation of government's Off-highway Vehicles Action Plan and work on the forest, minerals, parks and recreation, and biodiversity strategies. Although work on these two priorities has not advanced as fast as we would have liked, the department will be devoting considerable effort in 2006-2007 to these priorities and expect to make significant progress on both.

The priorities listed in this plan reflect the department's continued commitment to the principles of resource stewardship and the sustainable management of these resources. It is our intention to provide the direction and support needed for the successful completion of the initiatives the department will be undertaking in 2006-2007 and look forward to what will be a challenging and exciting year.

Original signed by

Honourable Brooke Taylor
Minister of Natural Resources

Date: April 27, 2006

Original signed by

Peter C. Underwood
Deputy Minister of Natural Resources

Date: April 26, 2006

2 Mission

A mission statement provides a brief, yet comprehensive statement of purpose for an organization. Some of the questions it may address are: who are we? what do we do? for whom do we do it? and why do we do it? For a government organization, the mission statement helps to explain why public resources are devoted to that organization and what the organization is doing.

The mission of the Department of Natural Resources is "to build a better future for Nova Scotians through responsible natural resources management".

3 Planning Context

The department has broad responsibilities relative to the management of forest, mineral, park and wildlife resources and the administration of the province's Crown land. Management in the context used here includes resource conservation, protection and development. In order to properly manage these resources, the department must recognize and take into account several key factors that significantly affect the province's resource sectors. These factors are not new and have not, for the most part, changed significantly in recent years.

3.1 Resource Sustainability

In 1987 the United Nations Commission on Environment and Development (the Brundtland Commission) reported that economic development often leads to a deterioration, not an improvement, in the quality of people's lives. The Commission also provided the most commonly used description of sustainable development. Sustainable development, according to this definition, is "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

Managing our resources, both renewable resources and non-renewable resources, in a manner that is consistent with this concept of sustainable development is critical. Our natural resources provide significant economic, social, cultural, and environmental benefits to Nova Scotians. The resource sector must be managed on a sustainable basis and these values are considered and taken into account when making decisions concerning resource uses.

3.2 Multiple Competing Demands for our Limited Land and Resource Base

A principal responsibility of the department is the management of provincial Crown lands in the province. Just over a quarter of the land in Nova Scotia is provincial Crown land. This is the second lowest proportion of Crown lands of all the provinces and territories, with only Prince Edward Island having a lower proportion. There are strong public expectations and numerous competing demands for the use of this limited public land and resource base, and how it is managed. There is also pressure to add to the provincial Crown land base by acquiring properties with specific characteristics valued by Nova Scotians.

In addition, the urbanization of the central part of the province has led to demands to limit Crown land resource development and to provide additional park facilities close to the population base. High demands being placed on beach parks in and near the Halifax Regional Municipality have been particularly noticeable in recent years.

3.3 Sustainability of Rural Communities

Over the last two decades the population has become increasingly concentrated in the central part of the province in Colchester, Halifax, Hants, and Kings counties. In most other counties the population has either declined or has remained stable.

The survivability of many rural communities depends on them being able to provide their residents with economic opportunities, access to essential services, and a quality of life that will attract new people and retain those already living there. The predominantly rural nature of the resource sector makes it one of the key sectors for supporting healthy rural communities throughout the province by providing economic activity in areas of the province where alternative opportunities are less readily available.

3.4 Climate Change and Weather

This department, and the resource sectors it manages, can be profoundly affected by weather events and climatic conditions. If changes occur in climate parameters, such as average temperatures, precipitation levels, sea level, storm frequency, and storm intensity, the department's operations and its budget requirements could be drastically affected.

Forest fires, insect infestations, wildlife and forest health, and park attendance are all influenced, both positively and negatively, by weather conditions. Warmer, drier conditions may increase the likelihood of forest fires, but may also result in more people going camping and visiting beaches. Cold, harsh winter conditions may prevent insects that could harm the forests from over-wintering. However, these same conditions may also make it more difficult for some types of wildlife to survive the winter. Ecosystems may also be affected, resulting in changes in wildlife habitat and native species health and the possible introduction of exotic pests (non-native wildlife).

3.5 Deteriorating Physical Infrastructure

Since the mid-1990s there has been a deterioration in many of the assets that make up the department's infrastructure. This has been the result of postponements in asset replacement and deferrals in maintenance. Infrastructure includes our fleet of vehicles, helicopters, buildings, parks facilities, and equipment.

3.6 Resource Sector Success

Nova Scotia is part of the global economy and our resource industries cannot escape what is happening nationally and internationally. Although the resource sectors are recognized as foundation industries in Opportunities for Prosperity, A New

Economic Growth Strategy, which is the province's economic growth and development strategy, the continued success of these important sectors is not guaranteed.

The forest industry has been impacted by the appreciation of the Canadian dollar, relative to the U.S. dollar, which has had the effect of making Canadian exports more expensive, and making it more difficult for local companies to compete internationally. Trade issues, such as the current softwood lumber exports dispute with the United States and pressure for forest products to receive environmental certification, have a significant impact on some of the companies that make up our resource industries and how they operate. Increases in energy costs (both electricity and petroleum products) in recent years have resulted in significantly higher costs for forest sector companies.

The minerals sector is seeing an increased demand for many commodities as the world economy grows. This has resulted in higher prices for many commodities and increased returns to producers. Exploration activity has been robust in recent years but is cyclical in nature. Factors that will help the province to be an attractive location for mineral exploration and development investment include the existence of a fair and responsive regulatory regime, the availability of up-to-date geoscience information, policies that encourage exploration, and knowledgeable geoscientists.

3.7 Public Awareness and Understanding of Natural Resources Issues

Many members of the public are unaware of the true extent of the province's foundation industries and how they operate. Some people believe that the forest and minerals sectors only include wood harvesting and mineral extraction. However, these sectors are much broader than that. These sectors directly support activities related to mineral exploration, forest management services, silviculture, geoscience, surveying and mapping, environmental planning, transportation of raw materials and manufactured products, and manufacturing. The resource sector needs sophisticated machinery and equipment, high technology products, and computers to operate and compete globally. Skilled labour is needed to provide these services.

Resource sector jobs tend to be highly paid and relatively long term, compared to the minimum wage, seasonal positions found in some other sectors. Manufacturing, fabrication, and assembly add value to the natural resources found in the province. Nova Scotia's mineral and forestry industries are among the province's leading industries in their application of advanced technology as companies make investments in technology to minimize costs, increase productivity, and improve environmental performance.

4 Strategic Goals

The department has identified four strategic goals that it will be focusing on for the medium term which, within the context of business planning used here, can be viewed as a three to five year time frame.

The department's goals are to:

- increase awareness and understanding of sound natural resources management principles and practices
- continuously improve departmental strategies for managing natural resources and Crown land
- improve internal departmental planning processes and management systems; and
- improve the department's work environment and the capacity of staff to deliver departmental programs and services.

5 Core Business Areas

Core business areas are collections of individual programs whose results and outcomes are fundamental to meeting the department's strategic goals and carrying out its mandate. The department can be organized into three core business areas and all activities can be allocated to one of these core business areas. The three core business areas are:

- Natural Resources Management;
- Crown Lands Administration; and
- Infrastructure and Support Services.

Generally speaking, DNR manages natural resources on an integrated basis. This means that the relationships between resource uses and the effects of management practices of one resource on other resources is taken into account when resource management decisions are being made. The department has responsibility for aspects of the management of natural resources on both Crown land and on private land. Individual resources, such as forests, wildlife, minerals, and parks, are all part of the Natural Resources Management core business area which is in keeping with our integrated approach to the management of the natural resources falling in the department's areas of responsibility.

The second core business area, Crown Lands Administration, covers the department's land related activities, which are independent of the resources on the land. Activities related to acquisitions, disposals, and leases are included in this core business area.

The final core business area is Infrastructure and Support Services. This core business area is mainly (but not entirely) made up of the internal activities used to support the first two core business areas, which are externally focused.

The department's website, www.gov.ns.ca/natr, provides an extensive amount of additional information on the department's programs and services.

5.1 Natural Resources Management

Natural Resources Management covers the department's broad responsibilities relative to the development, management, conservation, use, and protection of forest, mineral, park and wildlife resources.

Forestry responsibilities, on both Crown and private lands, include forest management planning and research, developing and implementing strategies that support and contribute to sustainable forests, maintaining the provincial forest inventory, producing data on the province's forest resources, monitoring primary forest production, and coordinating extension programs and support for industry development.

On private lands, the department leverages expenditures on silvicultural activities by providing a portion of the funding. DNR also provides technical and professional assistance and information, supports the construction of forest access roads, and monitors for compliance with regulatory requirements related to forest harvesting and forest management.

On Crown lands, the department administers the licensing of land for timber and other resource uses. Funding is provided to invest in silviculture in order to work towards forest sustainability, and a network of access roads on Crown lands is maintained. Protection-related responsibilities include the development and delivery of programs designed to protect Nova Scotia forests from fire, insects and disease, and to protect special sites, watercourses, and significant wildlife habitats.

Mineral responsibilities include the implementation of policies and programs dealing with exploration, development, management, and utilization of mineral resources. The department develops and implements strategies to support and promote the mineral resource sector, maintains databases of geoscientific information, tracks mineral production, monitors compliance with regulatory requirements, administers mineral royalties and the provincial mineral rights tenure system, coordinates interdepartmental regulatory reviews of mineral development projects, operates an abandoned mine opening remediation program, and provides professional assistance and advice with respect to mineral resources and provincial geology.

Geological studies, undertaken to understand and explain the province's geology, help to document the province's mineral endowment and define the potential for new mineral resources. These programs also provide needed information to support sound public policy decisions in areas such as mineral resource development, environmental protection, land use, and public health and safety.

Park responsibilities include the planning, design, development, and operation of over 120 camping and day-use parks, and natural area parks and park reserves, in addition to supporting facilities on Crown lands, various trails and other outdoor recreational opportunities and, through partnerships with community groups, on private lands. Parks and recreation programs and services provide quality recreational experiences to Nova Scotians and visitors to the province, while ensuring environmental, heritage and resource protection.

Wildlife responsibilities include research, development and delivery of programs, policies, and legislation for the management and conservation of the province's wildlife resources and their habitats, including endangered species initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. This also includes the

provision of educational and viewing opportunities at the provincial wildlife park in Shubenacadie.

Enforcement responsibilities include the development, coordination and operation of a departmental resource law enforcement and compliance program, which also provides enforcement services to the former Department of Agriculture and Fisheries, the protected areas program within the Department of Environment and Labour (DEL), and the Canadian Wildlife Service. A particular responsibility that has been added is off-highway vehicles related enforcement activities.

5.2 Crown Lands Administration

This core business area covers the department's activities related to the administration of the province's Crown lands. Crown Lands Administration encompasses the acquisition, leasing and disposal of interests in Crown lands, reconciliation and migration of Crown lands, co-ordination of government surveying requirements, carrying out Crown lands boundary line maintenance, maintenance of provincial Crown lands records and the Crown lands GIS cadastral database.

Nova Scotia's land mass is approximately 13 million acres, of which about 3.5 million acres are administered and controlled by DNR as provincial Crown lands (other departments, like Transportation and Public Works and the Department of Environment and Labour, also administer land holdings, such as highways, land with provincial government buildings, and wilderness areas). The department is also responsible for submerged lands along the province's nine thousand kilometres of coastline. Approximately 20 land-related statutes are administered by the department, as well as the provision of land-related services to other departments, such as land administration and designations for DEL, and activities undertaken in partnership with non-government conservation oriented organizations aimed at securing ecologically significant lands.

5.3 Infrastructure and Support Services

Infrastructure responsibilities include the maintenance and replacement of a fleet of hundreds of highway and other specialized vehicles (such as fire trucks, snowmobiles, ATVs, and tractors), as well as the operation and maintenance of five helicopters. The road vehicles are heavily used in almost every aspect of the department's program delivery and provide a range of capabilities, from staff transportation to heavy equipment operations. Helicopter uses include forest fire detection and suppression, ground search and rescue, and natural resource research and management. The DNR fleet (particularly helicopters) plays an important role in the province's emergency preparedness planning. Department facilities range from offices and depots, to pole barns, aircraft hangars, fire towers, and laboratories.

Central support services includes human resources (with a focus on implementing initiatives to support the Corporate Human Resources Strategy), information technology, financial, communications, legal, planning, asset management, risk management, records management, office administration, library services, and the Office of the Minister and Deputy Minister. As the host department for the

Resources Corporate Services Unit, financial, human resources, and information technology services are provided to the other resource departments, which are the Department of Agriculture, Nova Scotia Fisheries and Aquaculture, the Department of Environment and Labour, and the Department of Energy. Several other departments (Finance and the Public Service Commission) and numerous agencies (including Treasury and Policy Board, the Office of Aboriginal Affairs, Communications Nova Scotia, the Emergency Measures Organization, the Office of the Auditor General, the Voluntary Planning Board, and the Legislative House of Assembly), also receive certain support services from the Resources Corporate Services Unit. As a result, substantial budget expenditures reported as part of the department's budget are used to provide services and support to other departments and agencies.

6 Priorities

For 2006-2007, the department will concentrate on a dozen key, high-level strategic priorities that will ultimately lead to some significant changes in how the department operates during the next decade and in how the department carries out its responsibilities.

Several of the priorities are multi-year and will not be completed by the end of 2006-2007. The specific activities listed below for these priorities will be done this year. However, there will be new activities provided in next year's business plan that will cover work to be done in 2007-2008.

It should be noted that the following priorities are in addition to the department's many on-going activities that staff carry out on an annual basis, and that take a substantial portion of the department's effort and resources each year.

6.1 Increase Awareness and Understanding of Sound Natural Resources Management Principles and Practices

Natural resource users need to be able to make informed decisions on natural resource use. The department is responsible for providing resource users with direction and guidance on their responsibilities and obligations as resource users in the province. Nova Scotians in general should have an understanding of what encompasses sound natural resources management. The public should be able to trust the department and have confidence that efforts are being made to carry out natural resource management in a sustainable manner, using science-based decisions.

6.1.1 Social Marketing

The department is examining the way it communicates to both its constituents and the general public. Aspects of the communications process under review include: audience awareness/interest in natural resource topics, the perception of department initiatives, audience information requirements, internal communications, as well as existing communications and messaging strategies. The immediate result is expected to be an effective communication strategy that is both proactive and responsive. It

will be measured, reviewed and modified as required to satisfy both departmental and public information requirements.

Planned activities for 2006-2007 include:

- analyzing the findings of a public opinion survey that was carried out in March 2006;
- conducting (and reviewing findings) of an internal employee survey;
- identifying strengths/weaknesses and changes needed in current communication efforts; and
- developing a new communications strategy for the department, as well as a methodology to measure its effectiveness.

6.2 Continuously Improve Departmental Strategies for Managing Natural Resources and Crown Land

The department has broad responsibilities relative to the development, management, conservation and protection of the province's forest, mineral, and wildlife resources, the operation of the provincial parks system, and the administration of the province's Crown land. Numerous acts, regulations, strategies, policies, procedures, and guidelines are in place to provide rules, processes, and guidance for the department when carrying out these responsibilities. It is a continual challenge to develop new strategies and to keep existing strategies up-to-date and relevant.

6.2.1 Integrated Resource Management (IRM)

The department defines Integrated Resource Management, or IRM, to be "a planning and decision-making process that involves the coordination of resource management policies, programs and activities so that long-term sustainable benefits are optimized and conflicts among resource users are minimized." An IRM process is used for Crown lands administered by DNR so that we are able to take into account the relationships between the various resource uses and the effects of management practices of one resource upon others.

Integrated resource management includes two major processes. The initial process inventoried special land features, uses and resource values, and incorporated these into databases, which led to the development of goals and objectives for Crown land. Based on the information identified, the land use planning process recognizes and conserves special land features and uses, optimizes long term sustainable resource values, and minimizes conflicts.

A Long Range Management Framework (LRMF) is an ecologically based land use planning document. Each of the province's 39 ecodistricts will eventually be covered by an LRMF.

Planned activities for 2006-2007 include:

- finalizing the long-range management framework (LRMF) guidebook, which will then be used to provide direction and consistency when LRMFs are developed;
- completing the procedural guides for ecological landscape analysis and for ecological landscape design; and
- completing the ecological landscape analysis phase of the LRMF development process for at least 28 out of the province's 39 ecodistricts.

6.2.2 Land Acquisition Action Plan

When possible, the department acquires land that is added to the Crown land base. In recent years, acquisition opportunities have increased, the public is more aware of our limited public land base, and associated coastal access issues have taken on a higher profile. The focus for acquisitions has shifted from a sectoral approach to a department-wide holistic approach that attempts to balance regional needs. Several outstanding opportunities currently exist to add to the Crown land base. Funding has been provided that will permit several major acquisitions, resulting in significant economic, social, and environmental values, including ecological, heritage, coastal, recreational, tourism, and cultural, and supporting biodiversity in Nova Scotia

Planned activities for 2006-2007 include:

- developing an action plan for land acquisitions, using the Coastal Land Acquisition Strategy, developed in 2005-2006, to provide guidance and direction.

6.2.3 Resource Strategy Development

As part of a multi-year initiative, work is underway on a renewal of the department's forest and mineral strategies, development and implementation of a comprehensive system strategy and plan for our provincial parks, and preparation of a provincial biodiversity strategy. Action on these strategies was started late in 2004-2005.

The immediate result of this work will be a set of up-to-date, coordinated provincial strategies for forests, minerals, the provincial parks system, and biodiversity. These strategies will determine the priorities and direction for government actions necessary for the management of the resources covered by these strategies and the programs, services and activities related to their management. The ultimate result will be a policy framework that supports sustainable natural resource management, the conservation of a healthy natural environment, and current and new economic opportunities linked to these resources.

Assuming permission to proceed with public consultations is received, planned activities for 2006-2007 include:

- completing discussion guides for use with the forest, minerals, and parks and recreation strategies;

- holding public consultations and meetings with stakeholders and the aboriginal community to collect input, beginning with biodiversity;

- reviewing the information from consultations, drafting the individual strategies, and making these available to the public for review and comment; and

- finalizing the strategies and submitting them for approval by government.

During 2006-2007, a number of other documents will be prepared that will provide information needed to support the development of the strategies, or that will supplement the strategies. These include a State of the Forest report, the Code of Forest Practice Guidebooks, a biodiversity document to support the biodiversity strategy, and a proposed park system plan that will be reviewed and revised using the parks strategy that is developed.

6.2.4 Legislative and Policy Framework Improvements

The department has an extensive legislative and policy framework that governs the department's areas of responsibility with respect to forests, minerals, parks, beaches, trails, wildlife, and Crown land. This framework is made up of approximately 30 acts, several hundred regulations, and numerous policies and procedures that are used to manage natural resources in the province and to administer Crown land.

This framework must be comprehensive, relevant, and up-to-date in order to ensure that the department is able to effectively manage the province's natural resources and administer our Crown land.

Planned activities for 2006-2007 include:

- reviewing the Wildlife Management Areas and Sanctuaries regulations;

- completing the annual review of regulations under the *Wildlife Act*;

- identifying other legislative issues or requirements as a result of work done in 2006-2007 in the department's other priorities (especially work to be done on the resource sector strategies);

- completing the Code of Forest Practice Guidebooks, which are required to support the Integrated Resource Management (IRM) project;

- implementing "*An Act to Reconcile Crown Interest in Certain Ungranted Land*" and ensuring compliance with the Act, which will facilitate the efficient reconciliation of the encumbered property identification numbers (PIDs) (this commitment assumes that the Act, which has not been passed, is actually enacted); and

- preparing a draft policy that regulates offshore renewable energy projects (this assumes that approval of the establishment of an inter-departmental committee to

develop a governance regime for offshore renewable energy resources is received).

6.2.5 Climate Change Impact Analysis

Climate can be viewed as the average weather over an extended period of time for a given geographic location or region. Weather conditions are measured by parameters such as temperature (high, low and average), precipitation, and wind. Climate change can be viewed as a lc g-term shift in the climate of a specific location.

The impacts of climate change in Nova Scotia could result in changes in many climate and weather variables, including maximum and minimum temperatures, season lengths, levels of precipitation, precipitation intensity, a rise in sea level, and an increase in the number of intense storms.

Planned activities for 2006-2007 include:

- in cooperation with the Department of Energy, preparing an analysis of the potential impacts of climate change for each of the department's areas of responsibility (forests, minerals, parks, wildlife, and Crown lands).

Results of this analysis will provide background information needed for the development of our new strategies and to guide the implementation of adaptation measures and resource management decisions in the future.

6.2.6 Off-highway Vehicles Action Plan Implementation

The government released its Action Plan for Off-highway Vehicles (OHV) in October 2005. The Action Plan includes measures to improve public safety, prevent damage to the environment, protect private property rights, and steps to be taken to provide increased enforcement with respect to OHV issues.

The department has been given the responsibility to lead the Action Plan implementation and oversee an interdepartmental committee with nine departments contributing. All 39 of the recommendations are being addressed. While the Action Plan identified a 24-month implementation schedule, the work has been accelerated given the introduction of government bill #275 during the Fall 2005 sitting of the House. Regulations to support the changes made to the *Off-highway Vehicles Act* came into effect on April 1, 2006.

Planned activities for 2006-2007 include:

- developing relevant regulations required for 2006-2007;
- establishing an Off-highway Vehicles Ministerial Advisory Committee; and
- establishing relevant processes, policies and procedures for implementing key sections of the OHV Action Plan.

6.2.7 Registry of Mineral and Petroleum Titles Modernization

The Registry of Mineral and Petroleum Titles manages the province's mineral tenure management systems. Functions of the Registry include granting licences and leases to mineral rights applicants, keeping records of mineral rights disposition in the province, issuing licences, leases, notifications, releases, and other documents related to the province's mineral tenure system and tracking expenditures reported by mineral rights holders.

A significant modernization project needs to be undertaken for the Registry. From application to license, the existing processes are primarily paper-based, supported with desk-top tools, and available to clients only in the registry offices in Halifax. In order to operate efficiently, to comply with the province's move to e-business operations, to properly serve clients, and to be competitive with mineral tenure systems being implemented in other provinces, the registry must be converted to a digital system. A key benefit will be the provision of map-based remote access to the registry.

Planned activities for 2006-2007 include:

- analyzing existing systems to determine their suitability as a starting point for the Nova Scotia mineral registry digital systems;
- designing and developing a new registry database and the core application software to maintain the information contained in the registry; and
- designing and developing the GIS components for the map interface.

6.3 Improve Internal Departmental Planning Processes and Management Systems

Initiatives that support this goal relate to internal departmental planning and the collection of information needed to make sound decisions for effective operations, and for setting future priorities.

6.3.1 Business Continuity Planning

Business continuity planning is a pro-active planning process used to ensure the continued availability of essential programs, services, operations, and programs, in the event of a natural or man-made disaster. A business continuity plan includes: plans, measures and arrangements to ensure the continuous delivery of critical services and products, which permits the organization to recover its facilities, data and assets; and the identification of necessary resources to support business continuity, including personnel, information, equipment, financial allocations, legal counsel, infrastructure protection and accommodations.

The nature of the department's operations, our human resources, and our physical infrastructure makes it critical to have a comprehensive and up-to-date business continuity plan in place because, in all likelihood, the department will be heavily involved in dealing with the aftermath of most types of disasters that ever do occur.

Planned activities for 2006-2007 include:

- initiating the business continuity plan development process.

6.3.2 Infrastructure Maintenance and Replacement Plan

The department has under its management an extensive range of infrastructure, including buildings, parks and trails, information technology equipment, vessels, vehicles, and helicopters. Our infrastructure plays an integral role in achieving departmental goals and objectives within our mandated programs. In addition, the infrastructure is essential for providing effective program management and delivery, and for ensuring that safe workplaces and public facilities are available.

Much of this infrastructure is aging and, with finite resources limiting necessary re-investment, many items are being extended beyond their normal serviceable life. To manage the infrastructure into the future and to help to ensure that we have the necessary tools and services available for staff and the public, the department will develop a life cycle management program. The program will develop a strategic process to manage re-investment for infrastructure aimed at future sustainability.

Planned activities for 2006-2007 include:

- preparing an inventory of current assets;
- developing standards for both maintenance / operations and for life cycle; and
- evaluating the state of existing assets against these standards.

In 2006-2007, additional funding has been received for provincial park system infrastructure maintenance, repair and restoration. This will allow park infrastructure that has exceeded its normal operational life to be replaced using current day design standards and practices.

6.3.3 Business Planning / Operational Planning Integration

Business planning in the department follows the guidelines provided by Treasury and Policy Board which reflect the standard business planning process used within the provincial government. Operational planning within the department has been on-going for a number of years. Opportunities exist for the department's business planning and operational planning processes to be better integrated, resulting in additional benefits derived from both.

Planned activities for 2006-2007 include:

- implementing a planning framework within the department that will improve the effectiveness of our business planning and operational planning processes; and
- reviewing our existing performance measures and developing an improved performance measurement / information reporting framework.

6.4 Improve the Department's Work Environment and the Capacity of Staff to Deliver Programs and Services

Our staff are critical for delivering the public services provided by this department. Given the large number of staff who are eligible to retire in the next five years, the department must take steps to ensure that we are able to maintain a complement of dedicated public servants with the knowledge and skill sets needed to allow the department to continue to meet our mandate.

6.4.1 Human Resources Framework [1]

In response to the survey of staff within government that took place in 2004, as well as to support the Nova Scotia Corporate Human Resources Plan, a Human Resources Framework has been prepared for use in the department (and the other Resources Corporate Services Unit departments and client groups). This is a comprehensive framework that will play a vital role in the achievement of the department's overall strategic goals and objectives. The framework is divided into three sections: recruitment and retention, training and development, and occupational health and safety.

Planned activities for 2006-2007 include:

- delivering recruitment and selection workshops for all management employees;
- developing a departmental orientation program that will be ready for delivery by September 2006;
- coordinating a rewards and recognition pilot project;
- coordinating the human resource planning process within the department including:
    - identifying key positions;
    - identifying gaps to be met by recruitment and/or development; and
    - completing phase one of succession management with the delivery of performance management and career development workshops;
- implementing and coordinating a newly developed ability case management program;
- coordinating the delivery of diversity management for leaders training to all levels of management;

---

[1] The initiatives shown in this section cover the department's actions planned for 2006-2007 related to the Corporate Human Resources Strategy.

- proceeding with the implementation of a healthy workplace initiative in the department; and
- conducting an internal department-wide audit to assess the state of occupational health and safety compliance within the department.

7 Budget Context

The following table provides budget information for the department for 2005-2006 and for 2006-2007.

Department of Natural Resources - Budget Context			
	2005-2006 Estimate	2005-2006 Forecast	2006-2007 Estimate
	$ Thousands	$ Thousands	$ Thousands
Ordinary Revenues	$8,395	$8,803	$8,681
TCA Purchase Requirements	$2,100	$2,375	$13,900
Net Program Expenses:			
• Senior Management	$628	$628	$629
• Corporate Services Unit [2]	$7,102	$6,932	$7,194
• Renewable Resources	$9,573	$9,458	$10,125
• Mineral Resources	$3,278	$3,342	$3,258
• Regional Services	$35,411	$35,591	$36,758
• Planning Secretariat	$4,305	$4,159	$4,409
• Land Services	$2,801	$2,771	$3,464
Total - Net Program Expenses	$63,098	$62,881	$65,837
Total Funded Staff (FTE)	868.4	837.9	885.4

[2] The Corporate Services Unit figures include the cost of financial, human resources, and information technology services provided to a number of other departments and agencies.

8 Outcomes and Performance Measures

The following tables provide the department's current set of performance measures. The primary grouping for performance measures is by core business area. At a secondary level, performance measures are grouped by desired outcome. For each measure data is presented, whenever possible, for the most recent four years. A target value to be reached by some future year (which could be anywhere from 2006-2007 to 2009-2010) has also been set and is provided, along with strategies relevant to that measure which will contribute to the target value being attained for the year in question.

More detail on performance measures can be found on the department's website. This material was originally released in December 2003 as a supplement to the department's Accountability Report for 2002-2003. (This information has been updated each year with the latest update occurring in December 2005, with the release of the department's 2004-2005 Accountability Report.) The location for this information is http://www.gov.ns.ca/natr/outcomes/default.htm.

As mentioned earlier, it is our intention to review our set of performance measures during the up-coming year as a part of the work to be done to integrate operational planning and business planning. Our expectation is that next year's business plan will contain a significantly reduced number of measures that are better connected to specific departmental priorities.

Two major changes should be noted in this year's table of measures. The measure "area of forest resource lost to fires annually" has been dropped. Although this is important to the department, it was felt that it was not an appropriate performance measure since it is almost completely dependent on the vagaries of nature. Another measure, the "amount of silviculture investment on small private woodlots annually" has been revised to more accurately reflect the actual amount of silviculture that takes place. This measure is calculated as the sum of the completed silviculture credit value reported in the Registry of Buyers Annual Report and the funding provided to the Association for Sustainable Forestry to administer and fund a silviculture program.

Figures for 2005-2006 and, in some cases, for 2005 are not being reported in the 2006-2007 Business Plan. These figures will be provided when the department's 2005-2006 Accountability Report is released.

DNR Performance Measures

Core Business: Natural Resources Management							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
Sound Natural Resources Stewardship	Percentage of Crown land with Long Range Management Frameworks in place as of March 31 [3]	0% (2002)	0% (2003)	0% (2004)	0% (2005)	100% (2010)	• Devote resources to IRM teams and enhance capacity in GIS and modeling, to facilitate the completion of Long Range Management Frameworks (LRMFs).
	Number of "Species at Risk" partnerships in place as of March 31	5 (2002)	8 (2003)	12 (2004)	13 (2005)	15 (2010)	• Establish partnerships to enable protection or recovery of species at risk.
	Area of wetland influenced by wetland stewardship agreements concluded (hectares)	497 (2001-02)	262 (2002-03)	941 (2003-04)	2,626 (2004-05)	243 (2006-07)	• Work within the Eastern Habitat Joint Venture to establish wetland stewardship agreements.
	Number of Registered Buyers participating in Forest Sustainability Agreements	35 (2002)	31 (2003)	30 (2004)	NA (2005)	40 (2008)	• DNR staff will promote the development of Sustainability Agreements with the forest industry.
	Number of teachers and students receiving natural resources stewardship related training at the Wildlife Park	3,809 (2001-02)	3,800 (2002-03)	4,530 (2003-04)	4,460 (2004-05)	10,000 (2009-10)	• Provide effective wildlife education programs for school groups with the opportunity to see the animals which are part of the lesson. • Partner with Ducks Unlimited to provide a wetland educational message.
	Number of teachers, students, and community groups receiving natural resources stewardship related training at the Natural Resources Education Centre	6,603 (2001-02)	7,097 (2002-03)	5,262 (2003-04)	5,075 (2004-05)	8,000 (2009-10)	• Provide teacher in-service and professional development workshops. • Deliver education programs for school and youth groups at the Natural Resources Education Centre in Middle Musquodoboit.
Sound Natural Resources Stewardship	Percentage of province for which forest resource data is ten years old or less	50% (2002)	60% (2003)	70% (2004)	70% (2005)	100% (2007)	• Update forest inventory from air photography and satellite imagery. • Measurement of permanent sample plots. • Conversion of data into GIS database.
Sound Natural Resources Stewardship	Percentage of province for which geological maps are less than 25 years old	85% (2001-02)	85% (2002-03)	85% (2003-04)	75% (2004-05)	85% (2006-07)	• Prioritize geoscience mapping projects to address areas for which data are more than 25 years old. • Maximize the efficiency of re-mapping areas for which older data exist.

[3] As a result of knowledge gained from a pilot project, there has been a change in how the LRMFs are being prepared. Originally the department's intention was to prepare them sequentially. This has changed and now parts of each LRMF are being prepared simultaneously. Eventually all LRMFs will be completed and will be approved simultaneously.

Core Business: Natural Resources Management							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
	Number of new mineral occurrences added to the provincial mineral occurrences database	10 (2001-02)	123 (2002-03)	18 (2003-04)	19 (2004-05)	15 (2006-07)	• Continue existing program to locate, catalogue and describe mineral occurrences. • Maximize efforts to acquire data on newly discovered occurrences, as opposed to updates of data for known occurrences.
	Percentage of province for which aggregate resource information is less than 20 years old	30% (2001-02)	35% (2002-03)	35% (2003-04)	40% (2004-05)	50% (2006-07)	• Continue existing program to locate, catalogue and describe bedrock and surficial aggregate resources. • Focus program on areas in province for which new aggregate resources are critical to economic development.
Conservation of Ecosystem Function	Percentage compliance with *Wildlife Habitat and Watercourses Protection Regulations* under the *Forests Act* [4]	NA (2001-02)	NA (2002-03)	NA (2003-04)	29% (2004-05)	90% (2007-08)	• Promote and enforce Regulations. • Measure compliance.
	Percentage of park area meeting International Union for Conservation of Nature and Natural Resources (IUCN) protection and natural areas criteria as of March 31 [5]	70% (2001-02)	85% (2002-03)	85% (2003-04)	85% (2004-05)	maintain (2006-07)	• Identify properties for designation and prepare documentation. • Implement management plans that provide land use zoning criteria as described by provincial regulations. • Establish priorities for parks related acquisitions. • Review IUCN criteria guidelines and their application to park properties.
	Percentage of active mine sites practicing progressive reclamation	58% (2001-02)	55% (2002-03)	57% (2003-04)	65% (2004-05)	65% (2006-07)	• Promote progressive reclamation with mine operators.
Species Diversity	Percentage of endangered and threatened species with recovery plans in place [6]	92% (2001)	92% (2002-03)	86% (2003-04)	78% (2004-05)	100% (2006-07)	• Create Recovery Teams for each listed species and provide support in developing Recovery Plans.

[4] The *Wildlife Habitat and Watercourses Protection Regulations* came into effect in January 2002. The initial focus was on educational programs that explained how the Regulations protect ecosystem function. There has been a shift in focus to take a more active approach to compliance monitoring educational and advice continues to be provided to woodlot owners and contractors.

[5] New guidelines for applying the IUCN categories in the Canadian context have resulted in a need to review the current IUCN categorization of provincial park properties.

[6] Under the *Endangered Species Act*, plans are to be completed within a year of being listed as an endangered species and within two years of being listed as a threatened species.

Core Business: Natural Resources Management							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
Public Safety	Number of students successfully trained	1,053 (2001-02)	1,270 (2002-03)	1,149 (2003-04)	1,135 (2004-05)	1,150 (2008-09)	• Support the delivery of hunter, bowhunter, and trapper education courses.
	Number of high risk abandoned mine shafts remediated on Crown lands [7]	(2001-02)	(2002-03)	(2003-04)	(2004-05)	(2006-07)	• Maximize available funds through partnership programs. • Remediate mine shafts with available funds.
	• Abandoned Mines Program	27	17	12	14	16	
	• through partnerships	0	40	0	70	NA	
	• cooperation within government	8	13	31	16	NA	
Effective Management of Resource Supply	Amount of silviculture investment on small private woodlots (millions of silviculture credits)	6.8 (2001)	9.4 (2002)	9.0 (2003)	10.2 (2004)	9.0 (2006)	• Work with the forest industry to assist them in achieving full compliance with requirements of the *Forest Sustainability Regulations*. • Leverage private sector silviculture funding through Forest Sustainability Agreements. • Provide funding to the Association for Sustainable Forestry.
Effective Management of Resource Supply	Percentage of required value of silviculture on private and industrial lands completed [8]	134% (2001)	130% (2002)	159% (2003)	106% (2004)	100% (2008)	• Implementation of Forest Strategy / *Forest Sustainability Regulations*. • Wood supply analysis / GIS system analysis. • Audits, monitoring and compliance programs. • Registry of Buyers. • Communication and information initiatives.

[7] The number of mine openings remediated can vary significantly from year to year due to the complexity and cost of remediation. A target is only provided for work covered by the Abandoned Mines Program due to the uncertainty surrounding work done through partnerships and within government. (Partnership arrangements are with companies doing work on Crown land, and cooperation within government involves situations that deal with emergency situations that require immediate attention and remediation action.)

[8] Industrial and private lands are defined in the *Registration and Statistical Returns Regulations*. "Industrial landowner" means a landowner who owns a wood processing facility while "private landowner" means a landowner who does not own a wood processing facility. This measure is calculated as the ratio of the amount of silviculture work reported by registered buyers to the amount of silviculture work required in order to comply with the *Forest Sustainability Regulations*.

Core Business: Natural Resources Management							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
	Percentage of hunting / trapping regulations reviewed	100% (2001-02)	100% (2002-03)	100% (2003-04)	100% (2004-05)	100% (2006-07)	• Monitor wildlife populations with potential for over or under harvest. • Consult with stakeholders. • Recommend regulatory amendments.
	Percentage of mineral related acts and regulations reviewed in the last five years	100% (2001-02)	100% (2002-03)	100% (2003-04)	100% (2004-05)	100% (2006-07)	• Regularly assess all mineral related legislation as they are utilized. • Schedule detailed assessments as required and identify and recommend necessary changes.
	Percentage of "One Window Interdepartmental Committee meetings held within three weeks of receipt of request [9]	NA (2001-02)	100% (2002-03)	67% (2003-04)	75% (2004-05)	100% (2006-07)	• Continue dialogue with mineral sector clients on the importance of the One Window process to ensure submission of comprehensive applications. • Continue interaction with other government departments to ensure timely meetings and decision-making by the One Window Committee.

[9] This measure tracks one aspect of service to clients, by measuring the timeliness of One Window reviews of mining projects.

Core Business: Natural Resources Management							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
Awareness of Resource Development Opportunities	Number of parks related partnerships as of March 31	7 (2001-02)	10 (2002-03)	13 (2003-04)	16 (2004-05)	maintain (2006-07)	• Identify partnership opportunities within the park system. • Seek potential partners to develop and/or manage new outdoor recreation services and facilities.
	Number of requests for technical information and assistance from other government departments, regional development agencies, prospectors, developers, and mining companies	300 (2001-02)	350 (2002-03)	350 (2003-04)	500 (2004-05)	400 (2006-07)	• Participate in provincial, national and international conferences and trade shows. • Increase amount of mineral promotion information on the departmental website. • Maintain a close liaison with the Office of Economic Development.
	Number of downloads of technical geoscience information from the departmental website (thousands)	11.1 (2001-02)	18.9 (2002-03)	39.0 (2003-04)	48.7 (2004-05)	30.0 (2006-07)	• Continue ongoing program to post new geoscience information (maps, data and reports) on the departmental website. • Advertise availability of information at conferences and workshops and through department and external publications.
Recreational Opportunities	Area of designated provincial parks as of March 31 (hectares)	14,900 (2002)	14,200 (2003)	14,200 (2004)	14,200 (2005)	maintain (2007)	• Efficient and effective operation of provincial parks. • Identify potential properties for designation under the *Provincial Parks Act*. • Acquire lands to consolidate existing provincial parks or lands with significant recreational value.
	Length of trails in parks and on Crown lands as of March 31 (kilometres)	424 (2002)	472 (2003)	537 (2004)	536 (2005)	546 (2007)	• Work with partners to develop additional trail opportunities. • Develop new partnerships to facilitate development of additional trails.
Appreciation of Natural Resources	Number of visitors to Shubenacadie Wildlife Park (thousands)	98 (2001-02)	98 (2002-03)	92 (2003-04)	86 (2004-05)	110 (2009-10)	• Provide a natural setting with appropriate enclosures for animals. • Provide educational messages to ensure people get a good understanding of NS wildlife. • Partner with Ducks Unlimited to provide a wetland educational message.
	Occupancy rate at provincial camping parks during core season [10]	45% (2002)	46% (2003)	46% (2004)	NA (2005)	Maintain (2006)	• Upgrade facilities and services (market readiness). • Improve client services with new reservation - registration system. • Work with the Department of Tourism, Culture and Heritage to highlight provincial parks opportunities. • Develop new camping park promotions to attract new campers. • Develop new messaging promoting healthy lifestyles achieved through participation in outdoor recreation activities such as camping.

10 This measure was changed from the annual occupancy rate for the full season to the annual occupancy rate during the core season months of July and August.

Core Business Area: Crown Lands Administration							
Outcome	**Measure**	**Data**	**Data**	**Data**	**Data**	**Target**	**Strategies to Achieve Target**
A Modern and Efficient Land Administration System	Percentage of acts, regulations, and policies reviewed during last five years as of March 31	46% (2001-02)	68% (2002-03)	70% (2003-04)	70% (2004-05)	70% (2008-09)	• Regular assessment of all land administration acts, regulations, and policies as they are utilized. • Schedule detailed assessments as required and identify necessary changes.
	Number of resolved (NSPRD "green layer") PIDs affected by the ungranted Crown 40,000 series [11]	NA (2001-02)	NA (2002-03)	NA (2003-04)	NA (2004-05)	2,000 (2006-07)	• Creation of the Crown Land Migration Project Group. • Regular evaluation and reporting of progress in resolving Property Identifier Numbers (PID) issues with respect to ungranted Crown land parcels being migrated to the Nova Scotia Property Records Database (NSPRD).

[11] This measure was added as one indicator to track work undertaken by the Crown Lands Migration Project Group. The measure has been modified slightly to track the number of resolved PID's.